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**EVALUATION OF KENTUCKY'S
"YOU DRINK AND DRIVE. YOU LOSE" CAMPAIGN**





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**EVALUATION OF KENTUCKY'S
"YOU DRINK AND DRIVE. YOU LOSE" CAMPAIGN**

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EXECUTIVE SUMMARY

Alcohol and drug related crashes continue to be one of the highest priority problem identification areas and considerable emphasis is being placed on programs to impact those types of crashes. Various types of campaigns have been used over the years in an attempt to reduce the number of alcohol-related crashes. Kentucky was selected within the Southeast Region of the United States by the National Highway Traffic Safety Administration to conduct a comprehensive impaired driving campaign entitled “You Drink & Drive. You Lose”. The campaign was conducted around the 2002 Labor Day holiday. The objective of this report was to document the results of the “You Drink & Drive. You Lose” campaign in Kentucky.

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation included comparing crash data during the campaign with data for the same time period in previous years, summarizing the number of arrests and other enforcement activities, telephone surveys of drivers taken before and after the campaign, written motorist questionnaires obtained at driver licensing locations and high schools before and after the campaign, and summarizing the types of publicity.

Two types of comparisons were made between crash data around Labor Day in 2002 with the previous three years. The first set of data used single vehicle crashes occurring between 6 p.m. and 6 a.m. This type of crash has been used as a surrogate for alcohol crashes. The number of crashes in 2002 was 14 percent lower than the average of the three previous years with the number of injuries and fatalities occurring in these crashes 21 percent lower. The second comparison was the number of crashes in which either alcohol or drugs were listed as a contributing factor or it was noted that a driver was suspected of drinking. The number of these crashes in 2002 was 9 percent lower than the average of the three previous years with the number of injuries and fatalities in these crashes 5 percent lower.

The publicity did result in an increase in the percentage of drivers who were aware of this program and resulted in a significant increase in drivers who had heard of specific details of the campaign. The surveys did not find a change in self-reported behavior or perceived additional risk of arrest for driving after drinking. The survey at the circuit clerk offices and high schools also found that drivers were more aware of the use of checkpoints for identifying impaired drivers. The surveys support increased enforcement and additional penalties for the use of alcohol while driving. The most common source of information about the campaign was through television.

1.0 BACKGROUND

Alcohol and drug related crashes continue to be one of the highest priority problem identification areas and considerable emphasis is being placed on programs to impact those types of crashes. In Kentucky, the number of traffic crashes in which alcohol was listed as a contributing factor on the crash report has averaged about 5,743 per year for the five-year period of 1997 through 2001. Alcohol-related fatalities have averaged 206 per year during these five years (using Fatal Analysis Reporting System data). If the cost of an average motor-vehicle crash is used, the estimated annual cost of alcohol-related crashes in Kentucky is in the range of \$83 to \$231 million depending on the source of the crash cost estimates (economic cost or comprehensive cost from the National Safety Council).

Various types of educational and enforcement campaigns have been used over the years in an attempt to reduce the number of alcohol-related crashes. Kentucky was selected within the Southeast Region of the United States by the National Highway Traffic Safety Administration to conduct a comprehensive impaired driving campaign entitled “You Drink & Drive. You Lose”. The campaign was conducted around the 2002 Labor Day holiday and involved a combination of enforcement and publicity. In the five years of 1997 through 2001, there have been 51 fatalities during this Friday through Monday holiday period and alcohol was involved in 24 of those fatalities.

The Kentucky State Police Governor’s Highway Safety Program coordinated enforcement efforts with local law enforcement agencies statewide to conduct traffic safety checkpoints and saturation patrols in high crash locations to identify and arrest impaired drivers. A systematic approach was used with law enforcement, prosecutors, and judicial officials becoming traffic safety partners with the objective of reducing alcohol-related crashes.

The objective of this report was to document the results of the “You Drink & Drive. You Lose” campaign in Kentucky.

2.0 PROCEDURE

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation methodology included comparing crash data during the campaign with data for the same time period in previous years, summarizing the number of arrests and other enforcement activities, telephone surveys of drivers taken before and after the campaign, written motorist questionnaires obtained at driver licensing locations and high schools before and after the campaign, and summarizing the types of publicity used as part of the campaign. Following is a description of the procedures used in the evaluation.

2.1 Crash Analysis

The numbers of specific types of crashes occurring during the time period of the campaign in 2002 were compared with the numbers during the previous three years (1999 through 2001). Two types of comparisons were conducted. One analysis used the number of single vehicle crashes occurring between the hours of 6 p.m. and 6 a.m. This type of crash has been used as a surrogate for alcohol crashes. The second analysis used the number of crashes in which the investigating officer identified either alcohol or drugs as a contributing factor or noted that there was a suspected drinking driver involved in the crash. Data were included for 13 days which included the 11 days prior to Labor Day along with Labor Day and the day after. Following is a list of the days used in the comparison.

August 26, 1999 through September 7, 1999

August 24, 2000 through September 5, 2000

August 23, 2001 through September 4, 2001

August 22, 2002 through September 3, 2002

Crashes occurring in parking lots or private property were not included. The total number of crashes was summarized as well as the number of injuries and fatalities occurring in the crashes.

2.2 Enforcement

Enforcement was conducted by both the Kentucky State Police (KSP) and local agencies. Enforcement involved both checkpoints and saturated enforcement activity. The numbers of citations given and arrests made over the enforcement period were summarized as well as the number of officers involved and hours worked.

2.3 Telephone Survey

Two sets of telephone surveys were conducted by the University of Kentucky Survey Research Center. The first set was conducted from August 13 to 21, 2002, before the start of the enforcement campaign with the majority before the start of the media campaign. Respondents surveyed after the start of the media campaign were screened to ensure they had not been exposed to the campaign. The second set was from September 3 to 18, 2002, after completion of the enforcement. The instructions were to obtain information from an adult driver 18 years of age or older. The length of the interview was under 10 minutes.

Respondents were contacted using a modified, list-assisted Waksberg Random-Digit Dialing method giving every household with a telephone in Kentucky an equal probability of being contacted. Up to 15 attempts were made to each number in the sample. In addition, up to seven scheduled call-backs were made to those reached at an inconvenient time, and one refusal conversion was attempted. A sample size of 500 was desired for each survey period. The Survey Research Center also provided

a statistical analysis of the results.

The questions on the survey contained information about the drivers' drinking habits, their opinion about enforcement and penalties relating to drinking and driving, their knowledge of current DUI laws, whether they had heard about specific enforcement campaigns, the effect of the campaigns on their driving behavior, and some general demographic information. Some questions dealt with whether the driver was aware of the "You Drink & Drive. You Lose" campaign, the details of the campaign, and its impact on their driving behavior.

2.4 Motorist/High School Survey

Data were obtained using two sources of information. One data source was obtained at driver licensing offices. In Kentucky drivers renew their license at the circuit clerk's office. Drivers were asked to complete the survey while waiting to obtain their license. The other source of data was high school seniors, with this data collected at high schools. Both sets of data were collected before and after the campaign.

Data were collected in five counties scattered across the state with some counties in more rural areas and others in a more urban area. Both data sources were obtained in Boone, Hardin, Perry, and Warren Counties. Data were collected only at the circuit clerk's office in Fayette County and only at the high school in Anderson County.

The data from this survey were used to assess: a) the driver's habits concerning drinking and driving after drinking, b) awareness of impaired driving or seat belt enforcement programs, c) opinion about enforcement of alcohol and safety belt laws, d) knowledge of or exposure to checkpoints, and e) change in drinking and driving and use of safety belts.

2.5 Publicity

The types and amount of publicity were summarized. The types of paid media included broadcast and cable television, radio, and outdoor billboards.

3.0 RESULTS

3.1 Crash Analysis

Two types of comparisons were made between crash data around the Labor Day holiday in 2002 with the previous three years. The first set of data used single vehicle crashes occurring between 6 p.m. and 6 a.m. This type of crash has been used as a surrogate for alcohol crashes. Following is a summary of the number of this type of crash and the number of injuries and fatalities in these crashes occurring between the specified dates.

<u>Time Period</u>	<u>Number of Crashes</u>	<u>Number Injuries/Fatalities</u>
8/26/99 - 9/7/99	485	270
8/24/00 - 9/5/00	468	255
8/23/01 - 9/4/01	513	259
8/22/02 - 9/3/02	420	207

The number of crashes in 2002 was 14 percent lower than the average of the three previous years. The number of injuries and fatalities occurring in these crashes was 21 percent lower.

The second comparison used the number of crashes in which alcohol and/or drugs were listed as a contributing factor or it was noted that a driver was suspected of drinking. This comparison used all the crash data. Following is a summary of the number of crashes meeting this criteria occurring between the specified dates.

<u>Time Period</u>	<u>Number of Crashes</u>	<u>Number Injuries/Fatalities</u>
8/26/99 - 9/7/99	102	78
8/24/00 - 9/5/00	116	92
8/23/01 - 9/4/01	103	82
8/22/02 - 9/3/02	97	80

The number of crashes in 2002 was 9 percent lower than the average of the three previous years which is not a statistically significant decrease. The number of injuries and fatalities resulting from these crashes was 5 percent lower.

3.2 Enforcement

The enforcement period was a 13-day period from August 22 through September 3, 2002 (with Labor Day on September 2). A summary of the results of the enforcement is given in Table 1. The enforcement involved both saturated patrols and checkpoints and involved both Kentucky State Police (KSP) and local police. About 67 percent of the hours worked during the saturated enforcement activity were by the KSP.

There were a total of 1,454 alcohol (DUI) arrests along with 769 drug arrests made during the enforcement time period. Approximately 90 percent of these arrests were as a result of the saturated enforcement activity.

There were 465 checkpoints conducted involving 683 officers. The checkpoints resulted in 30,472 vehicles being checked and 3,744 hours worked by the officers. About 73 percent of the checkpoints were conducted by the KSP.

The most common citation was speeding (13,815) which occurred during the saturation patrols. There were also a total of 3,586 seat belt and 336 child restraint citations given with about 77 percent as a result of the saturation enforcement and about 60 percent by the KSP. Other types of citations were also given (14,480).

There were also 639 “wanted persons” arrested and 88 stolen vehicles recovered. Various other types of arrests occurred (2,561).

3.3 Telephone Survey

The University of Kentucky Survey Research Center conducted these surveys. The disposition results of the survey were as follows:

Pre-campaign survey:

Interviews completed	507
Refused	617
Not Eligible	332
Total	1,456
Response rate	45.1 percent

Post-campaign survey

Interviews completed	505
Refused	471
Not Eligible	329
Total	1,305
Response rate	51.7 percent

The margin of error for samples of this size is approximately plus or minus 4.36 percent at the 95 percent confidence level. The results of the surveys are given in Appendix A. The Survey Research Center provided a detailed summary of the responses to each question. They also provided results of a t-test for Independent Samples analysis and Lavene’s Test for Equality which were used to determine if changes in the responses for the pre- and post-surveys were statistically significant.

A summary of some of the results of the telephone surveys is given in Table 2. There was a slight increase (30.8 to 32.3 percent) in the percentage of drivers who indicated they observed police more often on the road than six months previous to the survey. Considering all drivers, the percentage

who indicated that, within the last 30 days, they had driven within two hours after drinking any alcohol increased slightly from 8.1 to 9.7 percent. This percent increased from 18.0 to 22.0 percent when drivers who noted they never drink alcohol were excluded. There was a slight decrease which was statistically significant (from 33.1 to 28.0 percent) in the percentage of drivers who thought it was almost certain or very likely for a driver who drove after having too much to drink would be stopped by the police. The percentage who had seen a sobriety checkpoint in the 30 days prior to the survey was almost identical (12.9 and 13.0 percent). There were very few statistically significant differences between the pre- and post-surveys.

A small percentage of drivers had heard of any new enforcement programs on drinking and driving (5.2 and 5.4 percent). However, the percentage of those aware of a new program and who had heard details of the program increased from 15.4 to 44.4 percent which was a statistically significant increase. The percentage who indicated they had heard of the “You Drink & Drive. You Lose” program, when asked specifically about that name, increased from 47.3 to 52.5 percent. However, of those who had heard of this specific program, the percent who noted that the program had an impact on their behavior decreased from 8.8 to 8.4 percent. The high percentage of drivers who had heard this name prior to the campaign would be related to the use of this name in other states and some use of this name in Kentucky prior to the beginning of this campaign.

The target group of drivers were males in the 18 through 34 years of age group. A separate summary was conducted for this group of drivers. A summary of the results of some of the questions relating more directly to the campaign is given in Table 3. The sample sizes for the pre- and post-surveys were 243 and 235 for males, 129 and 112 for drivers age 18 through 34, and 64 and 48 for males age 18 through 34. The results were very similar to those for all drivers given in Table 2. The highest percentage of drivers who had heard of the campaign was for males 18 through 34 years of age but this group had the lowest percentage which stated that it had an effect on their driving behavior.

There were several questions which gave additional information relating to this general subject. When asked how many drinks they could drink in two hours before they should not drive, about 75 percent of drivers who drink alcohol felt they could have up to two drinks. Almost all drivers (about 84 percent) thought a driver who was stopped for driving while intoxicated would almost certainly or very likely be arrested. Most (about 68 percent) felt a driver who was arrested would almost certainly or very likely be convicted of that offense. The percentage who indicated the enforcement of drinking and driving laws are too weak (about 42 percent) was much higher than too strong (about 5 percent). The percentage who thought penalties for breaking those laws are too weak (about 42 percent) was much higher than too strong (about 4 percent). Most drivers (about 83 percent) are aware of the use of Blood Alcohol Concentration (BAC) levels and that the BAC level at which it becomes illegal to drive had been lowered from 0.10 to 0.08 (about 75 percent). However, only about 21 percent knew that drivers under 21 had a lower BAC limit. Most drivers (about 61 percent) felt sobriety checkpoints should be used more frequently.

3.4 Motorist/High School Survey

A copy of the survey form is given in Appendix B. The surveys were completed in the circuit clerk's office in five counties (Boone, Fayette, Hardin, Perry, and Warren). These counties are from different geographical regions of Kentucky and have varying populations. Surveys were distributed in high schools (seniors) in each county although an Anderson County school was substituted for Fayette County where school was not in session during the survey period. The data were summarized by Preusser Research Group, Inc.

Data were collected before and after the campaign. Sample sizes were 329 before and 315 after at the circuit clerk offices and 1,779 before and 1,817 after at the high schools. Almost all of the drivers at the high schools were in the 16 to 20 years of age category while only eight percent of the drivers at the circuit clerk offices were in this age category. A complete summary of the data is given in Appendix B. A summary of the results for some of the questions which dealt more specifically with the campaign is given in Table 4.

The percentage of drivers who responded that, in the past 30 days, they had driven after they thought they had too much to drink changed from 17.0 to 19.1 percent for the circuit clerk data and from 12.1 to 12.7 percent for the high school seniors. The percent who thought that they would almost certainly or very likely be stopped by a police officer if they drove after having too much to drink remained almost identical (49.9 to 49.6 percent at circuit clerk offices and 46.2 to 45.3 percent at high schools). The percent who stated that, compared to three months prior to the survey, they drove less often after drinking stayed almost the same (6.1 to 6.0 percent at circuit clerk offices and 3.3 to 3.8 percent at high schools). There were very small differences in the percent who stated that, compared to three months prior to the survey, they observed more police on the road (28.4 to 24.5 percent at circuit clerk offices and 35.5 to 34.8 percent at high schools). More respondents thought enforcement of drinking and driving laws was too weak compared to being too strong with the percentage indicating enforcement was too weak higher at the circuit clerk offices than at the high schools.

There was a substantial increase in the percentage who had seen or heard about a checkpoint, in the past 30 days, where police were looking for impaired drivers (26.3 to 40.7 percent at circuit clerk offices and 27.6 to 39.8 percent for high schools). There was also an increase in the percentage who had gone through a checkpoint, in the past 30 days, where police were looking for impaired drivers (9.3 to 13.1 percent at circuit clerk offices and 15.6 to 18.6 percent for high schools).

There was an increase in the percent who had read, seen, or heard anything about impaired driving in Kentucky (44.3 to 56.8 percent at circuit clerk offices and 39.3 to 49.1 percent at high schools). The most common source of the information was television followed by newspapers and then radio. The percentage who specifically identified knowledge of the "You Drink & Drive. You Lose" campaign also increased (28.9 to 44.8 percent at circuit clerk offices and 25.3 to 44.6 percent at high schools). The percentage that indicated they were aware of this program before the start of the

campaign shows their previous exposure with this name. It should be noted that even after the campaign, the percentage aware of the “You Drink & Drive. You Lose” program was substantially less than the “Friends Don’t Let Friends Drive Drunk” program which had a recognition of about 75 percent.

There were several questions which dealt with seat belts. About 73 percent of drivers at circuit clerk offices indicated they always wore their seat belt compared to 61 percent at high schools. The percent who indicated enforcement of the seat belt law was too weak (about 27 percent) was substantially higher than those who thought it was too strong (about 9 percent). About 67 percent had recently read, seen, or heard about the seat belt law in Kentucky with television the most common source of the information. The seat belt programs with the most recognition were “Buckle Up Kentucky” with 71 percent and “Click It or Ticket” with 52 percent indicating they were familiar with the name.

3.5 Publicity

The paid media was administered by a private company (Paul Schultz Advertising in Louisville). It consisted of radio, broadcast television and cable television spots, as well as information placed on outdoor billboards. Following is a list of the costs of each type of media and the time period it was provided.

<u>Medium</u>	<u>Dates</u>	<u>Cost</u>
Radio	August 15 - August 30	\$103,540
Broadcast Television	August 15 - August 30	173,475
Cable Television	August 15 - August 30	30,196
Outdoor Billboards	August 15 - September 15	15,614
Total Paid Media		\$322,825

The numbers of radio and television spots that were part of the paid media were documented. There were 4,388 radio spots (1,918 paid and 2,470 bonus) provided at 31 stations in 10 cities. The radio spot was 60 seconds in length and was recorded specifically for the “You Drink & Drive. You Lose” campaign by the GMMB agency from Washington, D.C. The radio stations were spread across the state and had various formats. The largest number of spots and related costs were in the Louisville and Lexington markets.

There were 1,475 television spots (616 paid and 859 bonus) aired on 14 broadcast television stations in five cities (Bowling Green, Hazard, Lexington, Louisville, and Paducah). The network affiliates included NBC, CBS, ABC, FOX, and WB. Approximately 60 percent of the spots and 78 percent of the costs were in the Louisville and Lexington markets. The television spot was 30 seconds

in length and was recorded specifically for the campaign by the GMMB agency.

There were 4,661 television spots shown on cable television stations (1,746 paid and 2,915 bonus) in six markets (Ashland, Lexington Metro, Louisville area, Northern Kentucky, Owensboro, and Prestonsburg). The cable networks included were ESPN, ESPN2, MTV, Comedy Central, and USA. The same television spot was aired on cable.

Outdoor billboards (12 feet by 24 feet) were used in Lexington, Louisville, Paducah, and Owensboro with a total of 32 paper posters (20 paid and 12 bonus). One large (20 foot by 80 foot) vinyl bulletin was used on I 75 near Covington with two months paid and one month bonus. This large billboard was posted from August 15 through November 15. The outdoor posters were designed by Paul Schultz Advertising with the message “Free Portrait with Every DUI” and the “You Drink & Drive. You Lose” logo.

4.0 CONCLUSIONS

The analysis results in the following conclusions.

1. The number of related crashes which occurred during the dates of the 2002 campaign was less than occurred on the same dates in the previous three years. This applied to both the surrogate measure (single vehicle crashes occurring between 6 p.m. and 6 a.m.) and crashes in which alcohol was listed as a factor.
2. The publicity resulted in an increase in the percentage of drivers who were aware of the “You Drink & Drive. You Lose” campaign and a significant increase in drivers who had heard of specific details about the campaign.
3. The surveys did not find a change in self-reported behavior or perceived additional risk of arrest related to driving after drinking after the campaign.
4. The survey at the circuit clerk offices and high schools found that drivers were more aware of the use of checkpoints for identifying impaired drivers.
5. The surveys support increased enforcement and additional penalties for the use of alcohol while driving.
6. The most common source of information about the campaign was through television.

TABLE 1. "YOU DRINK, YOU DRIVE. YOU LOSE" CAMPAIGN ENFORCEMENT ACTIVITY BY KSP AND LOCAL AGENCIES

<i>Saturated Enforcement Activity</i>													
	Number of Officers	Hours Worked	Speeding Citations	Seatbelt Citations	Child Restraint Citations	DUI Arrests	Other Citations	Drug Related Arrests	"Wanted Persons" Arrests	Stolen Vehicles Recovered	Other Arrests		
KSP	914	41,876	6,175	1,448	134	438	4,660	138	61	8	725		
Local Police	2,916	83,956	7,640	1,314	119	828	7,689	578	545	79	1,719		
Total	3,830	125,832	13,815	2,762	253	1,266	12,349	716	606	87	2,444		
<i>Checkpoint Activity</i>													
	Number of Checkpoints	Vehicles Checked	Number of Officers	Hours Worked	Speeding Citations	Seatbelt Citations	Child Restraint Citations	DUI Arrests	Other Citations	Drug Related Arrests	"Wanted Persons" Arrests	Stolen Vehicles Recovered	Other Arrests
KSP	341	21,552	410	1,385	N/A	697	74	124	1,485	22	3	0	55
Local Police	124	8,920	273	2,359	N/A	127	9	64	646	31	30	1	62
Total	465	30,472	683	3,744	N/A	824	83	188	2,131	53	33	1	117
Grand Total	465	30,472	4,513	129,576	13,815	3,586	336	1,454	14,480	769	639	88	2,561

TABLE 2. TELEPHONE SURVEY RESULTS

Question	Response	Percent	
		Before	After
Frequency see police	More than 6 months ago	30.8	32.3
Frequency drink alcohol	Every day	2.0	1.8
	Several day a week	5.3	4.8
No. drinks 2 hrs. before/not drive (excluding never drink)	None	22.4	21.1
	1	26.0	23.0
	2	26.9	30.0
Driven after drinking	Yes (all)	8.1	9.7
	Yes (excluding never drink)	18.0	22.0
Likely to be stopped if drove after drinking	Almost certain or very likely	33.1	28.0*
Likely to be arrested if stopped while driving	Almost certain or very likely	84.6	84.1
Likely to be convicted if arrested for DUI	Almost certain or very likely	65.9	69.5
Enforcement DUI laws	Too strong	5.7	4.8
	Too weak	43.7	39.8
Penalties for DUI laws	Too strong	3.9	4.2
	Too weak	44.7	39.4
Aware of BAC levels	Yes	82.8	83.3
Aware of change to 0.08	Yes	77.5	72.0
BAC for under 21 years of age compared to 21 or older	Higher	8.7	7.1
	Lower	23.6	18.3
	Same	67.7	74.6
Seen sobriety checkpoint (last 30 days)	Yes	12.9	13.0
Frequency of sobriety checkpoints	More frequently	61.8	60.4
	About same	31.0	30.4
	Less	5.4	7.6
	Not be used	1.8	1.6
Heard of new DUI enforcement If yes, heard details	Yes	5.2	5.4
	Yes	15.4	44.4*
Heard of program called "You Drink & Drive, You Lose" If yes, has it had an effect on your behavior	Yes	47.3	52.5
	Yes	8.8	8.4

*Indicates which questions/responses were found to have a statistical difference between the before and after percentages. A t-test was used with an alpha of 0.05.

TABLE 3. RESULTS OF TELEPHONE SURVEY FOR SELECTED GROUPS OF DRIVERS

Question	Response	Male		Percent 18-34		Male 18-34	
		Before	After	Before	After	Before	After
Frequency see police	More than 6 months ago	30.2	29.3	32.6	36.4	28.6	34.0
Driven after drinking	Yes (all)	14.0	16.2	10.9	14.3	20.3	27.1
	Yes (excluding never drink)	29.1	31.4	18.7	25.0	33.3	39.4
Likely to be stopped if drove after drinking	Almost certain or very likely	36.3	28.8*	34.6	27.9	34.9	22.9
Seen sobriety checkpoint (last 30 days)	Yes	15.6	17.5	18.8	15.2	20.3	16.7
Heard of new DUI enforcement	Yes	5.3	8.1	5.4	5.4	6.3	4.2
	If yes, heard details	7.7	42.1*	0.0	83.3*	0.0	100.0
Heard of program called "You Drink & Drive, You Lose"	Yes	46.9	56.1*	45.0	57.7	43.5	59.6
	If yes, has it had an effect on your behavior	11.3	8.3	10.0	10.8	13.8	3.4

*Indicates which questions/responses were found to have a statistical difference between the before and after percentages. A t-test was used with an alpha of 0.05.

TABLE 4. RESULTS OF MOTORIST/HIGH SCHOOL SURVEY

Question	Response	Circuit Clerk Office Percent		High School Percent	
		Before	After	Before	After
Times driven after drinking in past 30 days	More than once	17.0	19.1	12.1	12.7
Likely to be stopped if drove after drinking	Almost certain	25.5	26.5	18.1	18.8
	Very likely	24.4	23.1	28.1	26.5
Compared to 3 months ago how often drive after drinking	More often	0.7	0.4	2.1	3.4
	Less often	6.1	6.0	3.3	3.8
	About same	11.9	11.2	5.8	7.1
	Don't D&D	81.2	82.5	88.8	85.7
Frequency see police	More often, than 3 months ago	28.4	24.5	35.5	34.8
Enforcement DUI laws	Too strong	6.4	5.1	5.6	5.6
	Too weak	38.0	34.6	26.4	27.2
Seen/heard about checkpoint for Impaired drivers	Yes	26.3	40.7	27.6	39.8
	No	73.7	59.3	72.4	60.2
Gone through checkpoint	Yes	9.3	13.1	15.6	18.6
	No	90.7	86.9	84.4	81.4
Read/seen/heard impaired driving messages	Yes	44.3	56.8	39.3	49.1
	No	55.7	43.2	60.7	50.9
If yes, where	Newspaper	46.0	48.2	45.7	43.0
	Radio	30.7	41.7	30.8	46.6
	TV	63.5	61.3	59.9	71.5
	Poster	5.8	11.3	13.5	22.2
	Brochure	2.9	3.0	5.8	9.2
	Checkpoint	2.9	7.1	9.0	15.0
Know name of drink/drive program?	You D&D You Lose	28.9	44.8	25.3	44.6

APPENDIX A. TELEPHONE SURVEY RESULTS

APPENDIX A. RESULTS FROM TELEPHONE SURVEY

Question	Response	Percent	
		Before	After
Thinking about the roads you normally drive on, how often do you see police on these roads compared to 6 months ago?	More now than 6 months ago	30.8	32.3
	About the same	61.5	62.1
	Less now than six months ago	7.7	5.6
Frequency of alcohol consumption	Every day	2.0	1.8
	Several days a week	5.3	4.8
	Once a week or less	8.1	10.7
	Weekends only	4.7	3.8
	Just celebrations/special occasions	24.9	23.0
	Never	55.0	56.0
<i>Excluding those who responded "never" to previous</i>			
How many drinks can you have in 2 hours before you should not drive?	0	22.4	21.1
	1	26.0	23.0
	2	26.9	30.0
	3	10.8	12.7
	4	6.7	6.1
	5	2.7	2.3
	6	2.2	3.8
	> 6	2.1	0.9
In the past 30 days, have you driven within 2 hours after drinking?	Yes	18.0	22.0
	No	82.0	78.0
How many times in the last 30 days have you driven within 2 hours after drinking?	1	45.0	50.0
	2	27.5	18.8
	3	15.0	10.4
	4	5.0	4.2
	5	5.0	2.1
	> 5	2.5	14.7
How many times in last 30 days did you drive when you thought you had too much too drink?	0	90.2	85.4
	1	7.3	12.5
	2	2.4	2.1
In the past 30 days, have you avoided driving because you felt you had too much too drink to drive safely?	Yes	53.7	44.9
	No	46.3	55.1
If yes, on the most recent time that you deliberately avoided driving after drinking, how did you do it; that is, what did you do instead?	Called a cab or a ride	27.3	22.7
	Rode with some other driver	40.9	45.5
	Stayed overnight as a guest	13.6	4.5
	Waited until after the effects of the alcohol wore off	9.1	0.0
	Walked to destination	9.1	9.1
	Stayed home	0.0	18.2

APPENDIX A. RESULTS FROM TELEPHONE SURVEY (continued)

Question	Response	Percent	
		Before	After
In the past 30 days, when you knew alcohol would be available at some event, how often, if ever, did you plan ahead before going to an event to avoid drinking and driving afterward?	Never planned ahead for the event	17.5	26.5
	Rarely or a few times planned ahead	12.5	12.2
	Frequently or almost every time planned ahead	67.5	61.2
	Never knew alcohol would be available	2.5	0.0
In general, do you deliberately avoid drinking during times when you know there is an increased enforcement of drinking and driving laws?	Yes	34.1	38.8
	No	65.9	61.2
How likely is it that someone would be stopped by a police officer for driving after they have had too much to drink?*	Almost certain	9.1	7.6
	Very likely	23.9	20.4
	Somewhat likely	40.0	39.8
	Somewhat Unlikely	17.2	20.4
	Very unlikely	9.7	11.8
If a police officer stops someone for driving while intoxicated, how likely would it be they would be arrested?	Almost certain	57.7	58.0
	Very likely	26.9	26.1
	Somewhat likely	12.4	13.0
	Somewhat Unlikely	2.6	1.8
	Very unlikely	0.4	1.0
If someone was arrested for driving while intoxicated, what is the likelihood that they would be convicted of that offense?	Almost certain	35.5	36.4
	Very likely	30.4	33.1
	Somewhat likely	24.7	20.4
	Somewhat Unlikely	4.9	6.4
	Very unlikely	4.5	3.7
If someone was convicted of driving while intoxicated in your community, what would you expect to happen to them?	Lose drivers license	55.0	53.9
	Go to jail	45.8	51.3
	Fine	43.0	42.2
	Attend classes or meetings	10.3	10.7
	Probation	6.7	5.1
	Miscellaneous	6.5	5.0
	Community service	5.3	3.6
	Counseling/Treatment	4.1	3.0
	Higher insurance rates*	3.0	2.2
	Having car impounded *	2.6	0.2
	Nothing will happen	2.0	2.0
	Go to court	1.8	0.8
	Points deducted from license	0.8	0.8
	Receive ticket	0.4	0.2

APPENDIX A. RESULTS FROM TELEPHONE SURVEY (continued)

Question	Response	Percent	
		Before	After
Do you think enforcement of drinking and driving laws in your community is too strong, too weak, or about right?	Too strong	5.7	4.8
	Too weak	43.7	39.8
	About right	50.6	55.3
Do you think the penalties for breaking drinking and driving laws in your community are too strong, too weak, or about right?	Too strong	3.9	4.2
	Too weak	44.7	39.4
	About right	51.4	56.4
Have you ever heard of blood alcohol concentration or BAC levels?	Yes	82.8	83.3
	No	17.2	16.7
If yes, were you aware that the law was recently changed in Kentucky lowering the BAC level at which it becomes illegal to drive from .10 to .08?	Yes	77.5	72.0
	No	22.5	28.0
Is the legal blood alcohol concentration limit for drivers under 21 higher or lower than for drivers 21 or older, or is the limit the same for drivers of all ages?	Higher	8.7	7.1
	Lower	23.6	18.3
	The same	67.7	74.6
In the past 30 days, have you personally seen a sobriety checkpoint where police briefly stop vehicles to check for alcohol-impaired driving?	Yes	12.9	13.0
	No	87.1	87.0
If yes, about how many times have you seen these kinds of checkpoints in the past 6 months?	1	23.8	9.5
	2	20.6	31.7
	3	17.5	19.0
	4	12.7	11.1
	5	3.2	12.7
	6	4.8	7.9
	> 6	17.5	8.0
How many times have you been through a checkpoint in the last 6 months?	0	39.7	32.3
	1	19.0	20.0
	2	14.3	23.1
	3	12.7	13.8
	4	4.8	3.1
	5	1.6	1.5
	6	1.6	1.5
> 6	6.4	4.5	

APPENDIX A. RESULTS FROM TELEPHONE SURVEY (continued)

Question	Response	Percent	
		Before	After
Do you think sobriety checkpoints should be used more frequently, about the same as they are now, or less frequently?	More frequently	61.8	60.4
	About the same	31.0	30.4
	Less frequently	5.4	7.6
	Should not be used at all	1.8	1.6
Have you heard of any new enforcement programs on drinking and driving in your community?	Yes	5.2	5.4
	No	94.8	94.6
If yes, what was it called?	You Drink & Drive, You Lose	18.8	31.3
	Team DUI	6.3	0.0
	Friends Don't let Friends Drive Drunk	25.0	25.0
	Checkpoint Strikeforce	6.3	12.5
	Please Step Away From Your Vehicle	43.8	0.0
	Something Else	0.0	31.3
Have you heard any details of what they are doing here in Kentucky?*	Yes	15.4	44.4
	No	84.6	55.6
If yes, can you tell me what they are doing specifically?	Increased checkpoints	50.0	50.0
	Roving patrols	0.0	8.3
	Other	50.0	41.7
Have you heard of a program called You Drink, You Drive, You Lose?	Yes	47.3	52.5
	No	52.7	47.5
If yes, where did you see or hear the message, You Drink & You Drive, You Lose?	Television	45.2	50.2
	Other	16.3	12.2
	Radio	13.4	13.3
	Billboards	8.8	9.9
	Newspapers	7.1	9.1
	Friend/family member	3.8	3.4
	Gas station	2.5	1.1
	School	2.1	1.1
	Bumper sticker	2.1	0.4
	Work	2.1	0.4
	Miscellaneous	2.1	3.0
	Road sign	0.8	0.0
	Courthouse	0.8	2.7
	Has this program had any impact on your behavior?	Yes	8.8
No		91.2	91.6

APPENDIX A. RESULTS FROM TELEPHONE SURVEY (continued)

Question	Response	Percent	
		Before	After
If yes, how has this program affected you or your behavior?	More aware of problem	52.4	45.5
	More likely to report drinking drivers	4.8	4.5
	Drink less	9.5	13.6
	Drink less when I have to drive	9.5	4.5
	Drive less after drinking	4.8	0.0
	Avoid drinking and driving situations	9.5	22.7
	Plan ahead for drinking and driving	9.5	4.5
	Other		
What is your age?	18-24	7.9	6.3
	25-34	17.6	15.8
	35-44	20.2	22.4
	45-54	21.7	22.2
	55-64	15.0	13.5
	65 +	16.4	18.2
Including yourself, how many persons, 16 or older, are living in your household at least half of the time or consider it their primary residence?	1	30.8	23.9
	2	48.4	55.2
	3	15.2	15.3
	4	4.0	4.8
	5	1.2	0.4
	6	0.2	0.2
	> 6	0.2	0.2
Of the other persons 16 years or older, how many drive a car, truck, motorcycle or other motor vehicle, at least occasionally?	1	12.4	5.3
	2	64.0	53.5
	3	17.6	13.1
	4	4.3	3.6
	5	1.4	0.2
	6	0.3	0.4
What county do you live in? (these responses were converted to Kentucky State Police Post locations)	1	6.7	7.1
	2	5.1	4.2
	3	6.7	5.9
	4	19.6	20.8
	5	2.8	3.2
	6	9.1	10.7
	7	6.7	9.3
	8	4.0	3.0
	9	4.2	3.2
	10	2.2	2.6
	11	3.6	5.5
	12	12.6	10.7
	13	2.0	3.8
	14	4.2	4.4
	15	4.0	2.2
	16	6.7	3.6

APPENDIX A. RESULTS FROM TELEPHONE SURVEY (continued)

Question	Response	Percent	
		Before	After
Do you consider yourself to be Hispanic or Latino?	Yes	1.4	1.8
	No	98.6	98.2
If yes, what is your ethnic background?	Mexican	28.6	14.3
	Spanish	0.0	14.3
	South American	0.0	42.9
	Central American	0.0	14.3
	Puerto Rican	14.3	0.0
	Something Else	57.1	14.3
Which of the following racial categories describes you?	American Indian or Alaskan Native	5.4	5.8
	Asian	0.4	1.0
	Black or African American	5.8	3.2
	Native Hawaiian or other Pacific Islander	0.4	0.0
	White	90.4	93.0
	Some other race	1.2	0.6
What is the highest grade or year of school you completed?	8th grade or lower	5.6	6.2
	9th grade	1.6	2.4
	10th grade	1.2	1.8
	11th grade	3.2	2.6
	12th grade/GED	35.9	32.9
	Some college/Post secondary education	24.8	21.8
	College graduate or higher	27.7	32.3
Was your total pre-tax household income:	Less than \$5,000	3.1	3.3
	\$5,000 to \$10,000	4.6	4.9
	\$10,000 to \$15,000	6.8	7.3
	\$15,000 to \$20,000	7.5	4.2
	\$20,000 to \$30,000	18.5	15.7
	\$30,000 to \$50,000	24.2	28.3
	\$50,000 to \$75,000	13.0	20.5
	\$75,000 to \$100,000	12.5	6.6
\$100,000 or more	9.9	9.3	
Gender	Male	47.9	46.5
	Female	52.1	53.5
Driving Frequency	Almost everyday	90.1	89.3
	Few days a week	8.3	9.1
	Few days a month	1.6	1.2
	Few days a year	0.0	0.2
	Other	0.0	0.2

*Indicates which questions/responses were found to have a statistical difference between the before and after percentages. A t-test was used with an alpha of 0.05.

APPENDIX B. MOTORIST/HIGH SCHOOL SURVEY AND RESULTS

The University of Kentucky Research Center is assisting in a study about highway safety in Kentucky. Your answers to the following questions are voluntary and anonymous.

1. What is your sex? Male Female
2. What is your age? 16–20 21–29 30-45 46-64 65 or older
3. What is your race? White Black or African-American Asian Native American Other
4. Are you of Spanish/Hispanic origin? Yes No
5. What is your zip code?
6. How often do you usually drive a car or other motor vehicle?
Every day Several days a week Once a week Only certain times a year Never
7. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pickup?
Always Nearly always Sometimes Seldom Never
8. During the past 30 days, how often did you usually drink any alcoholic beverages, including beer, wine or liquor?
Would you say you usually drink alcoholic beverages? (check one)
Every day Celebrations/Special occasions
Several days a week Never
Once a week or less Don't know
Weekends only
9. In the past 30 days, how many times have you driven a motor vehicle within two hours after drinking alcoholic beverages? Enter number of times:
10. On the most recent occasion when you drove within two hours after drinking alcoholic beverages, how many drinks (of beer, wine, liquor) did you have? Enter number of drinks:
11. About how many times in the past 30 days did you drink and drive when you thought you had too much to drink?
Enter number:
12. If you drive after having too much to drink, how likely are you to be stopped by a police officer?
Almost certain Very likely Somewhat likely Somewhat unlikely Very unlikely
13. Compared with 3 months ago, are you now driving after drinking? (check one)
More often Less often About the same Do not drive after drinking
14. Compared with 3 months ago, have you been using your seat belt? (check one)
More often Less often About the same Not sure
15. Compared with 3 months ago, do you see police on the road you normally drive? (check one)
More often Less often About the same Not sure
16. In your opinion, do you think enforcement of drinking and driving laws in your community is too strong, too weak, or about right? Too strong Too weak About right Don't know
17. In your opinion, do you think enforcement of the seat belt law in your community is too strong, too weak, or about right?
Too strong Too weak About right Don't know

18. The effect of alcohol can vary from one person to another, depending on body weight. For classification purposes only, what is your approximate weight? Pounds
19. In the past 30 days, have you seen or heard about a checkpoint where police were looking for impaired drivers?
Yes No
20. In the past 30 days, have you gone through a checkpoint where police were looking for impaired drivers?
Yes No
21. Have you recently read, seen, or heard anything about impaired driving in Kentucky?
Yes No
If yes, where did you see or hear about it? (check all that apply)
Newspaper Radio TV Poster Brochure Police checkpoint Other
22. Have you recently read, seen, or heard anything about the seat belt law in Kentucky?
Yes No
If yes, where did you see or hear about it? (check all that apply)
Newspaper Radio TV Poster Brochure Police checkpoint Other
23. Do you know the name of any impaired driving enforcement program(s) in Kentucky? (check all that apply)
You Drink & Drive. You Lose. Checkpoint Strikeforce
Team DUI Please Step Away From Your Vehicle
Friends Don't Let Friends Drive Drunk
24. Do you know the name of any seat belt program(s) in Kentucky? (check all that apply)
No Excuses, Buckle Up Checkpoint Strikeforce
Buckle Up Kentucky Operation 35, Buckle Up, Stay Alive Click It or Ticket

APPENDIX B. RESULTS OF MOTORIST/HIGH SCHOOL SURVEY

Question	Response	Circuit Clerk Office Percent		High School Percent	
		Before	After	Before	After
Sex	Male	47.4	47.0	45.0	44.1
	Female	52.6	53.0	55.0	55.9
Age	16-20	10.0	5.8	99.9	98.9
	21-29	33.1	29.8	0.1	0.3
	30-45	33.1	33.3	0.0	0.1
	46-64	21.6	28.2	0.0	0.3
	65+	2.1	2.9	0.0	0.5
Race	White	82.3	88.7	84.5	84.9
	Black	13.5	8.1	9.4	8.7
	Asian	1.2	0.6	1.8	1.7
	Native Am	1.8	0.3	0.5	0.7
	Other	1.2	2.3	3.9	4.1
Hispanic	Yes	1.9	2.6	3.9	4.2
	No	98.1	97.4	96.1	95.8
How often drive	Every Day	82.8	85.5	69.8	67.4
	Several Days	11.0	9.5	12.9	12.5
	Once a week	3.1	2.4	5.4	6.7
	Certain times	2.1	0.3	3.9	3.9
	Never	0.9	2.4	7.9	9.5
Use seat belts	Always	72.3	73.1	60.7	60.9
	Nearly Always	14.0	14.9	17.0	17.1
	Sometimes	9.4	7.8	10.8	11.1
	Seldom	2.4	1.9	6.7	6.2
	Never	1.8	2.3	4.8	4.7
Frequency of alcohol consumption	Every Day	2.1	6.8	3.9	4.8
	Several Days	8.9	10.1	3.7	2.6
	Once a week	15.3	15.0	5.5	4.9
	Weekends	8.3	7.8	12.8	11.9
	Celebrations	25.8	24.4	22.3	16.8
	Never	38.7	35.5	48.6	56.2
	Don't know	0.9	0.3	3.2	2.8
Times driven after drinking	None	83.0	80.9	87.9	87.3
	More than once	17.0	19.1	12.1	12.7
Number drinks while driving	One	38.0	34.3	21.7	17.7
	More than one	62.0	65.7	78.3	82.3
Drink too much, in past 30 days	One or more	4.0	4.1	4.2	5.6

APPENDIX B. RESULTS OF MOTORIST/HIGH SCHOOL SURVEY (continued)

Question	Response	Circuit Clerk Office Percent		High School Percent	
		Before	After	Before	After
Likely to be stopped if drove after drinking	Almost certain	25.5	26.5	18.1	18.8
	Very likely	24.4	23.1	28.1	26.5
	Somewhat likely	21.0	23.1	26.6	32.3
	Somewhat unlikely	10.0	8.4	8.7	7.9
	Very unlikely	19.2	18.9	18.5	14.5
Compared to 3 months ago how often drive after drinking	More often	0.7	0.4	2.1	3.4
	Less often	6.1	6.0	3.3	3.8
	About same	11.9	11.2	5.8	7.1
	Don't D&D	81.2	82.5	88.8	85.7
Now using seat belt	More often	28.4	27.8	32.5	28.8
	Less often	2.9	1.4	5.2	5.7
	About same	65.8	70.2	57.4	61.5
	Not sure	2.9	0.7	4.9	4.0
See police, than 3 months ago	More often	28.4	24.5	35.5	34.8
	Less often	9.0	5.7	8.4	8.2
	About same	57.7	66.4	47.4	49.5
	Not sure	4.8	3.4	8.7	7.6
Enforcement DUI laws	Too strong	6.4	5.1	5.6	5.6
	Too weak	38.0	34.6	26.4	27.2
	About right	45.0	51.2	46.7	47.5
	Don't know	10.5	9.2	21.3	19.7
Enforcement belt laws	Too strong	10.3	10.1	9.9	8.5
	Too weak	26.3	31.2	26.0	26.9
	About right	52.6	50.7	47.2	47.9
	Don't know	10.9	8.1	16.9	16.8
Seen/heard checkpoint for Impaired drivers	Yes	26.3	40.7	27.6	39.8
	No	73.7	59.3	72.4	60.2
Gone through checkpoint	Yes	9.3	13.1	15.6	18.6
	No	90.7	86.9	84.4	81.4
Read/seen/heard impaired driving messages	Yes	44.3	56.8	39.3	49.1
	No	55.7	43.2	60.7	50.9

APPENDIX B. RESULTS OF MOTORIST/HIGH SCHOOL SURVEY (continued)

Question	Response	Circuit Clerk Office Percent		High School Percent	
		Before	After	Before	After
If yes, where	Newspaper	46.0	48.2	45.7	43.0
	Radio	30.7	41.7	30.8	46.6
	TV	63.5	61.3	59.9	71.5
	Poster	5.8	11.3	13.5	22.2
	Brochure	2.9	3.0	5.8	9.2
	Checkpoint	2.9	7.1	9.0	15.0
	Other	19.0	14.3	35.2	29.0
Belt law message	Yes	63.6	63.6	68.2	67.9
	No	36.4	36.4	31.8	32.1
If yes, where	Newspaper	32.5	42.2	31.6	32.6
	Radio	32.5	41.2	30.6	43.6
	TV	63.4	60.4	57.2	65.2
	Poster	21.6	28.3	28.4	37.0
	Brochure	4.1	7.5	6.2	10.0
	Checkpoint	2.1	5.3	7.0	9.9
	Other	16.0	16.0	33.3	29.0
Name of drink/drive program	You D&D You Lose	28.9	44.8	25.3	44.6
	Team DUI	3.6	4.4	6.9	7.5
	Friends don't let...	60.8	61.3	75.6	79.7
	Checkpoint Strikeforce	4.6	7.6	3.4	4.2
	Please step away...	5.5	10.2	7.5	8.7
Name of belt program	No Excuses...	11.6	12.4	17.8	23.4
	Buckle Up KY	56.5	58.4	70.8	74.8
	Click it or ticket	33.7	45.4	50.5	58.7
	Checkpoint Strikeforce	1.8	3.8	3.1	3.5
	Operation 35...	5.5	4.8	4.9	6.8